

WHAT IS CLAIMED IS:

1. An electrochromic mirror, comprising:

a transparent substrate wherein an electrochromic film which is reduction-colored is formed on the back thereof, and an electrically conductive light reflecting film which is permeable to hydrogen atoms and has electrical conductivity is formed on the electrochromic film,

a substrate which has an electrically conductive part having electrical conductivity on at least one side, and is provided in a vicinity of the transparent substrate in a state where the electrically conductive part faces the electrically conductive light reflecting film, and

an electrolysis solution which contains at least a hydrogen ion and a material oxidizable with a neutral molecule or an anion, and is sealed between the electrically conductive light reflecting film of the transparent substrate and the electrically conductive part of the substrate.

2. The electrochromic mirror according to claim 1, wherein

the electrically conductive part of the substrate is an electrode film having electrical conductivity and formed on the substrate.

3. The electrochromic mirror according to claims 1 or 2, wherein

a material for the electrochromic film of the transparent substrate contains at least one of tungsten trioxide and molybdenum trioxide.

4. The electrochromic mirror according to any one of claims 1 to 3, wherein

a material for the electrically conductive light reflecting film of the transparent substrate is selected from a metal belonging to the platinum group, and an alloy of silver and a metal belonging to the platinum group.

5. The electrochromic mirror according to any one of claims 1 to 4, wherein

a material for the electrically conductive light reflecting film of the transparent substrate is rhodium.

6. The electrochromic mirror according to any one of claims 1 to 5, wherein

the electrolysis solution is a gel containing a polymer or an inorganic substance that

does not react with the electrolysis solution.

7. An electrochromic mirror, comprising:

a transparent substrate wherein an electrochromic film which is reduction-colored is formed on the back thereof, and an electrically conductive light reflecting film which is permeable to lithium atoms and has electrical conductivity is formed on the electrochromic film,

a substrate which has an electrically conductive part having electrical conductivity on at least one side, and is provided in a vicinity of the transparent substrate in a state where the electrically conductive part faces the electrically conductive light reflecting film, and

an electrolysis solution which contains at least a lithium ion and a material oxidizable with a neutral molecule or an anion, and is sealed between the electrically conductive light reflecting film of the transparent substrate and the electrically conductive part of the substrate.

8. The electrochromic mirror according to claim 7, wherein

the electrically conductive part of the substrate is an electrode film having electrical conductivity and formed on the substrate.

9. The electrochromic mirror according to claims 7 or 8, wherein

a material for the electrochromic film of the transparent substrate contains at least one of tungsten trioxide and molybdenum trioxide.

10. The electrochromic mirror according to any one of claims 7 to 9, wherein

a material for the electrically conductive light reflecting film of the transparent substrate is selected from a metal belonging to the platinum group, and an alloy of silver and a metal belonging to the platinum group.

11. The electrochromic mirror according to any one of claims 7 to 10, wherein

a material for the electrically conductive light reflecting film of the transparent substrate is rhodium.

12. The electrochromic mirror according to any one of claims 7 to 11, wherein

the electrolysis solution is a gel containing a polymer or an inorganic substance

which does not react with the electrolysis solution.

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2. References and description

Claims 1 to 12

The inventions described in claims 1 to 12 are not described or suggested in any of the known references listed in International Search Report.